

selecting, as enzyme sources, a) a culture broth of a microorganism capable of producing guanosine-5'-triphosphate ("GTP") or uridine-5-triphosphate ("UTP") from a nucleotide precursor, or a treated product of the culture broth selected from the group consisting of a concentrated product of the culture broth, a dried product of the culture broth, a culture supernatant obtained by centrifuging the culture broth, a concentrated product of the culture supernatant, an enzyme preparation obtained from culture supernatant, cells obtained by centrifuging the culture broth, a dried product of the cells, a freeze-dried product of the cells, a surfactant-treated product of the cells, a solvent-treated product of the cells, a protein fraction of the cells, an immobilized product of the cells and an enzyme preparation obtained by extraction from the cells, and b) a culture broth or culture broths of at least one strain of microorganism having genes responsible for production of guanosine diphospho-sugar ("GDP-sugar") or uridine diphospho-sugar ("UDP-sugar") from a sugar selected from the group consisting of glucose, fructose, galactose, glucosamine, N-acetylglucosamine, N-acetylgalactosamine, mannose, fucose and N-acetylmannosamine, or a treated product of the culture broth selected from the group consisting of a concentrated product of the culture broth, a dried product of the culture broth, a culture supernatant obtained by centrifuging the culture broth, a concentrated product of the culture supernatant, an enzyme preparation obtained from culture supernatant, cells obtained by centrifuging the culture broth, a dried product of the cells, a freeze-dried product of the cells, a surfactant-treated product of the cells, a solvent-treated product of the cells, a protein fraction of the cells, an immobilized product of the cells and an enzyme preparation obtained by extraction from the cells;